John Gisclon EPRI Project Manager, ICET Electric Power Research Institute P.O. Box 1256 Ashland, OR 97520

SUBJECT: REQUESTED INFORMATION FROM CHARACTERIZATION OF MATERIALS

ASSOCIATED WITH INTEGRATED CHEMICAL EFFECTS TESTS 1 AND 2

Dear Mr. Gisclon:

In an email dated March 24, 2005 (Enclosure 1), you requested that Nuclear Regulatory Commission (NRC) staff provide information from the Integrated Chemical Effects Testing (ICET) program that the industry considers to be essential so that vendors can "effectively and correctly identify the impact of chemical effects on the GSI-191 issue and propose options for resolution of adverse effects." The information you requested pertains to characterization of sediment collected at the end of ICET tests 1 and 2 and to the precipitant visible in the water samples after test 1. I responded to you, via email, on April 12, 2005 (Enclosure 2) indicating what information would be provided to satisfy your request.

The enclosed report (Enclosure 3) provides the fiberglass and particulate fractions, the total sediment mass, and samples of sediment elemental composition for test 1 and 2 sediment. The qualitative settling behavior testing was only conducted for test 1 sediment as originally requested (Enclosure 1). Sediment samples will be provided, upon request, if you would like to conduct additional characterization testing not described in the attached report.

The elemental composition of the test 1 precipitant captured in the filter of the high volume sample is also provided in the attached report. As indicated in my earlier response (Enclosure 2), work continues to determine the chemical compounds present in the precipitant. This information will be made publicly available when it has been completed. Precipitant samples can also be obtained upon request for conducting additional characterization testing in advance of this public release.

Also, photographs of test 1 and 2 deposits found in the fiberglass are provided (Enclosure 3) for additional consideration. The understanding of how these deposits impact the emergency core cooling system (ECCS) recirculation pump performance is necessary to ensure that the effects of chemical by-products have been adequately considered in the licensee evaluations that are discussed in Generic Letter 2004-02.

J. Gisclon -2-

If you require any additional information or have questions regarding this response, please contact me at 301-415-6657 or via email at rlt@nrc.gov.

Sincerely,

/RA/

Robert L. Tregoning Engineering Research Applications Branch Division of Engineering Technology Office of Nuclear Regulatory Research

Enclosures:

- 1. Email from J. Gisclon to B. Jain and R. Tregoning, Subject: Analyses Requested for Resolution of Run 1 Issues, dated March 24, 2005.
- 2. Attachment to email from R. Tregoning to J. Gisclon, Subject: NRC Presentation and Response to 3/24 Email, dated April 12, 2005.
- 3. Response to Industry Request for Expedited Sample Characterization, Revision 0, April, 2005.

-2-J. Gisclon

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Robert L. Tregoning **Engineering Research Applications Branch** Division of Engineering Technology Office of Nuclear Regulatory Research

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